

REMARKS

Claims 1-14 and 16-25 are pending in the application. Claims 4-10, 12-14, 16-19, and 22 are allowed. Claims 3 and 23 are objected to as being dependent upon a rejected base claim but would be allowed if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. Claims 20 and 23-25 are amended to more positively recite Applicants' patentably novel work-vehicle cabin, and claim 11 is canceled, without prejudice, to reduce the issues. Claim 26 is added to set forth Applicants' patentably novel work-vehicle cabin in varying scope.

Applicants respectfully traverse the objection to claim 23, however, to reduce the issues, claim 23 is amended to include all of the limitations of base claim 11, on which claim 23 is directly dependent. Claim 24 is amended to be dependent on claim 23. Support for the amendments to claims 23 and 24 is found, among other places, in the pending claims. Based on the foregoing, Applicants respectfully request admission of the amendments to, and consideration of, claims 23 and 24; withdrawal of the objection to claim 23 and the rejection of claim 24; and respectfully request allowance of claims 23 and 24.

Applicants respectfully traverse the objection of claim 3. Claim 3 is indirectly dependent on rejected claim 1. Applicants, in the discussion below, clearly show that claim 1 is patentably novel over the applied art. In view of the foregoing, Applicants, at the present time, are maintaining claim 3 as a dependent claim, indirectly dependent on claim 1.

Claims 1, 2, 20, 21, and 25 are rejected under 35 U.S.C. § 102(e) as being clearly anticipated by U.S. Patent No. 6,780,097 to Shuttleworth et al. (hereinafter referred to as "Shuttleworth"). The Office Action alleges that Shuttleworth discloses a vehicle roof structure for a cabin of a work vehicle and includes a roof unit (10) which is downwardly bulging, and is the forward region of the cabin (see Figs. 1 and 4), a heater (26B), an evaporator (26A) arranged adjacently rearwardly of the heater (see Fig. 4), a pair of forward air-supply openings (12 and 13) provided in the ceiling portion and disposed near the heater and is on either side of the heater allowing conditioned air to be fed into the cabin. The roof unit includes a lateral air-supply opening (36), which is part of the partition wall structure (36, 40) and is in contact relationship with the heater by way of elements (58, 60). Shuttleworth furthermore includes an eave portion (see Fig. 1, characterized by elements 52 and 54), which encloses a window portion (66).

Applicants respectfully traverse the rejection of claims 1, 2, 20, 21, and 25, and request reconsideration thereof. Claims 2 and 25 are directly dependent on claim 1, and claim 21 is directly dependent on claim 20.

For a full appreciation of Applicants' patentably novel work-vehicle cabin, Applicants will first discuss the patentably novel features of claim 20 and, thereafter, Applicants will discuss the patentably novel features of claim 1.

Claim 20 recites a work-vehicle cabin having an air-conditioning unit. The work-vehicle cabin includes, among other things, a roof unit; a downwardly-bulging ceiling portion constituting a part of the roof unit, the ceiling portion located in a forward region of the cabin; a partition wall that is provided to the ceiling portion and that separates conditioned air from unconditioned air; a heater provided in the ceiling portion, wherein at least a part of the heater is positioned forwardly of a forward wall of the partition wall and feeds conditioned air forwardly of the partition wall; an evaporator provided in the ceiling portion and arranged adjacently rearwardly of the heater; and a pair of forward air-supply openings provided forwardly of the partition wall in the ceiling portion and respectively disposed laterally of the heater for allowing conditioned air to be fed to the inside of the cabin.

Claim 20 is amended, at line 13, by deleting "separation" and inserting --partition-- to maintain consistent terminology. Support for the amendment to claim 20 is found in pending claim 20. Based on the foregoing, Applicants respectfully request admission of the amendment to claim 20 and consideration of claims 20 and 21.

Claim 20 recites, among other things, a partition wall (24, see Fig. 3) that functions to separate conditioned air from unconditioned air; a heater that functions to feed conditioned air forwardly of the partition wall (away from the rear window of the vehicle), and a pair of forward air-supply openings provided forwardly of the partition wall and respectively disposed laterally of the heater that function to allow conditioned air to be fed to the inside of the cabin.

Shuttleworth, on the other hand, has the evaporator 26A and the heater core 26B at the forward region of the roof or cabin (as Shuttleworth is read by the Office Action) and discloses an arrangement where ambient air is taken into the roof unit by way of the intake louver 54 (column 6, lines 15 and infra of Shuttleworth) and rearwardly of a separation wall, through the evaporator 26A and the heater core 26B. The heater core 26B functions to

move the air rearwardly of the separation wall, i.e., toward the rear window of the work-vehicle, and into the cabin of the work-vehicle through openings 38.

Applicants respectfully submit that Shuttleworth moves the conditioned air rearwardly of the separation wall into the cabin through openings, whereas Applicants' claim 20 recites that the conditioned air is moved forwardly of the partition wall and into the cabin through a pair of forward air-supply openings. Based on the foregoing, Applicants respectfully submit that the disclosure of Shuttleworth cannot anticipate Applicants' claims 20 and 21.

Claim 1, on which claims 2 and 25 are dependent, recites a work-vehicle cabin having, among other things, a roof unit having a downwardly bulging ceiling portion constituting a part of the roof unit, the ceiling portion located in a forward region of the cabin. A heater and an evaporator are provided in the ceiling portion, with the evaporator arranged adjacently rearwardly of the heater. A pair of forward air-supply openings is provided in the ceiling portion and respectively disposed close to and on either side of the heater for allowing conditioned air to be fed to the inside of the cabin.

Claim 25 is amended to recite, among other things, that the evaporator is between the rear window of the cabin and the heater. Support for the amendments to claim 25 is found, among other places, in pending claim 25 and the drawings, e.g. but not limited to, Fig. 3. Based on the foregoing, Applicants respectfully request admission of the amendments to claim 25, and reconsideration of claims 1, 2, and 25.

Claim 1 recites an evaporator 26A arranged adjacently rearwardly of the heater (e.g., the evaporator between the rear window and the heater core (claim 25)), and a pair of forward air-supply openings in the ceiling portion and respectively disposed close to and on either side of the heater for allowing conditioned air to be fed to the inside of the cabin. As discussed above, Shuttleworth moves the ambient air forwardly of a separation wall and through an evaporator and heating core toward the rear window.

Since Applicants' evaporator and heater are positioned in an opposite relationship from the evaporator and heating core of Shuttleworth, Shuttleworth cannot anticipate Applicants' claims 1, 2, and 25.

Based on the foregoing, Applicants respectfully request withdrawal of the rejection of claims 1, 2, 20, 21, and 25, withdrawal of the objection to claim 3, and request allowance of claims 1-3, 20, 21, and 25.

Claim 26, added by this Amendment, is dependent on claim 20 and recites, among other things, a partition wall in the ceiling portion, the wall having a first major surface facing the rear window of the cabin and an opposite second major surface, with the evaporator on the first major surface and the heater and air-supply openings on the second major surface of the partition wall. With this arrangement, the air moves through the heater in a direction away from the rear window. Shuttleworth, on the other hand, as discussed above, discloses that the heater moves the air toward the rear window of the cabin.

Support for new claim 26 is found, among other places, in the pending claims. Based on the foregoing, Applicants respectfully request admission, consideration, and allowance of claim 26.

Conclusion

This Amendment is a sincere effort to place this application in condition for allowance. In the event issues remain, the Examiner is invited to call the undersigned before further action is taken on this application.

Respectfully submitted,

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